
Government of the District of Columbia



DC Department of Public Works

**Fiscal Year 2017
Performance Oversight Hearing**

Testimony of
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Director

Before the
Committee on Transportation and the Environment
Council of the District of Columbia
Councilmember Mary M. Cheh, Chairperson

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Good morning, Chairperson Cheh and members and staff of the Committee on Transportation and the Environment. I am Christopher Shorter, Director of the Department of Public Works (DPW). With me today are DPW's General Counsel, Christine Davis and Agency Fiscal Officer, Perry Fitzpatrick. On behalf of Mayor Muriel Bowser, I appreciate the opportunity to discuss the programs and services provided by the Department and its accomplishments in Fiscal Year 2017 (FY17) and FY 2018 to date.

Mayor Bowser's Fiscal Year 2017 Budget reflected our deep commitment to DC values by making investments that will provide all residents of the District of Columbia with the opportunity to succeed. We remain focused each day on creating pathways to the middle class by investing in education, affordable housing, infrastructure, public safety, and people.

With the support and guidance of Mayor Bowser and City Administrator Rashad Young, over the last year we have proudly performed our traditional services—solid waste management, parking enforcement, fleet management, and snow removal—to preserve the District's status as a world class capital city and continue to welcome people from across the nation and around the world who visit and do business in our beautiful city.

As you know, the District attracts thousands of new residents each year, which accounts for the tremendous growth experienced during the past decade. As an agency we are evolving to keep pace with this growth and the needs of our residents, businesses, commuters, and visitors. More importantly, we are leveraging advanced technology to better meet the demands of our growing city and anticipate future needs.

Of course, our progress is not possible without our employees—our most valuable asset. From illegal dumping investigations to alley cleaning; dead animal retrieval to assisting with the presidential inauguration; graffiti removal and street sweeping to trash, recycling, and public litter can collections; snow removal and rush hour tows; to fleet management and residential permit parking enforcement, DPW employees proudly serve the District every day of the year. By far, they are some of the most committed and generous workers you will ever meet.

My testimony today is organized into four parts. I will begin with an overview of our program enhancements, followed by a series of updates related to our commitment to environmental sustainability. I will then discuss our engagement with the community, followed by investments we are making in our employees.

Program Enhancements

Throughout all of DPW's operations—Solid Waste Management, Parking Enforcement Management, Fleet Management, as well as the Office of Waste Diversion—we are constantly enhancing our programs to meet the needs of residents. I would like to take the next few minutes to highlight some of the enhancements we are most proud of from the last year.

On May 1, 2017, DPW launched the second annual "DC Clean Alley" initiative to beautify Ward 8 alleys and create a safer, more attractive environment. The initiative was a partnership between DPW and the Department of Housing and Community Development (DHCD), which provided funding through a federal grant designated specifically for community improvements. In FY 17,

DPW cleaned 599 alleys to help address illegal dumping, abandoned vehicles, rodent infestation and other sanitation and safety concerns that can create space for neighborhood blight and crime.

As you know, increased rodent activity has been a major concern throughout the District. Given that rats survive off food waste, trash, and pet waste, our crews, including our overnight crews who empty the city's more than 7,000 public litter cans, play an important role in the District's rodent control efforts. Over the last year, the District also installed 400 smart cans throughout the city, which relay data to a cloud-based web service. We have also installed, in partnership with the Department of Health, 25 solar cans that are rat proof and compact trash without being connected to the electrical grid.

Over the last year, DPW's Fleet Management Administration has made significant strides in reducing acquisition time—between 33 and 70 percent, depending on the type of equipment. As an example, this past August we requisitioned to purchase 10 heavy duty refuse trucks with a delivery deadline of April 2, 2018. We created an inspection team to visit the production line within the first three months of our order to ensure that the trucks were being built to our specifications. This, coupled with other improvements we have made, resulted in all 10 of the trucks being delivered and put into service by the end of January—a full three months ahead of schedule.

In September, DPW rolled out an electronic messaging service that allows any motorist to receive text or email alerts when their vehicle has been booted, towed, or relocated in the District. Prior to the new messaging system, if a District driver believed their car had been towed, their only option was to call our towed vehicle locator hotline. More than 50,000 vehicles are affected by towing and booting services in the District each year. This is an excellent example of how we are employing technology to increase the quality of the services we deliver.

Another example of how we are harnessing the power of new technology is the Vehicles on Demand pilot program DPW is running in partnership with the Department of For-Hire-Vehicles. Currently, when a District government employee needs to travel around the city for work, they use an agency vehicle or our Fleet Share program, which is based on the Zipcar model. The Fleet Share program was rolled out in 2008 and has been successful, but technology has advanced in the years since the program was first introduced. Under the new pilot program, when a District employee needs a vehicle for local work travel, they simply summon a taxi on their smartphone, much like a commercial ride hailing service. This new system has several advantages:

- First, it allows for increased productivity. As anyone who drives in the city knows, finding a parking spot can sometimes take time. We want our employees to spend their time working, not looking for a parking space.
- Second, there is a potential to save taxpayer dollars. Depending on the level of participation, DPW plans to adjust our fleet over the next several years, resulting in cost savings in acquisition, technology, fuel, and maintenance.
- Third, it is good for the environment. Over time, and depending on the results of the program, we may be able to begin taking some of the city's vehicles off the road. This, in turn, would lead to less traffic congestion and air pollution.

- And fourth, it provides greater accessibility. Transportation can sometimes be a challenge for District employees with disabilities. Having the ability to hail a wheelchair-accessible vehicle with door-to-door service is a real benefit.

There are currently 24 agencies participating in the pilot program.

This past year, we also enhanced our snow program. While there have been several areas of improvement, including expanding our service to clear bike lanes and pedestrian pathways, one achievement I am particularly pleased with is our newly implemented anti-icing program. In the past, limited equipment restricted the number of routes we could treat with our brine and beet juice mixture. This season, with more equipment, we have been able to treat all District routes. Pre-treating roads with liquid brine allows us to prevent snow and ice from forming a bond with street surfaces, thereby reducing the amount of time it takes to restore roads to safe travel by as much as 50 percent. This and other improvements, such as the Automated Vehicle Location (AVL) equipment installed on all our snow equipment, were detailed in the October cover story of the American Public Works Association's magazine.¹

I should also note that we are moving forward with installing this same type of AVL technology on our refuse trucks to gain real-time information on the status of our equipment. Information like this flows into our data warehouse, which serves as a central repository for all the important data elements we collect. The goal is to have this information available to run analyses and create dashboards that will better inform our operations.

Environmental Sustainability

In addition to these program enhancements, we have also made significant progress in becoming a greener department and city. As you know, the District has set the goal of diverting 80 percent of its waste away from landfills. With the leadership and support from the Mayor, this Committee, the District government, and our community partners, this is a goal we believe we can achieve.

On December 7, 2017, I came before this committee to provide an update on DPW's progress in implementing the Sustainable Solid Waste Management Amendment Act of 2014. In my testimony I went into detail on a number of our zero waste achievements from the last year. As a refresher, here are some of the highlights:

- In October of 2017, DPW kicked off a major campaign to educate residents about the expanded list of recyclable items in the District. The campaign included an educational mailer sent to DPW-serviced households, a comprehensive advertising campaign, and wide-ranging community engagement that included stakeholder and community meetings, tabling at relevant conferences and expos, a Twitter chat, and earned media pitches.
- Along with residential requirements, there were also new commercial recycling requirements that went into effect on January 1, 2018. To prepare commercial properties, DPW—in partnership with the Department of Energy and Environment (DOEE)—

¹ https://issuu.com/apwa/docs/201710_reporteronline

offered 13 recycling webinars and meetings targeting various stakeholder segments, such as colleges and universities, the food and beverage industry, and multifamily residential properties. This is in addition to the in-person visits to District foodservice establishments DPW conducted in conjunction with DOEE to help explain the new foodservice packaging and recycling requirements.

- As part of our public outreach, DPW's Office of Waste Diversion, in partnership with the Interagency Waste Reduction Working Group, devised and created a zero waste website. The website serves as a one-stop resource for District residents, businesses, and schools to learn how to recycle, compost, reduce waste, and properly dispose of hazardous waste. The website also contains extensive information on food waste prevention, how to opt-out of bulk mail, and a directory of charities that accept clothing and durable goods donations.
- On the enforcement side, our Office of Waste Diversion and Solid Waste Education and Enforcement Program (SWEEP) inspectors are cross training with a specific focus on recycling education, commercial recycling, sustainability, DPW's waste diversion goals, and new regulations such as solid waste collector reporting, to name a few. In FY 2017, our SWEEP inspectors issued 924 citations for a range of code violations related to recycling. The most common citation, for which 390 tickets were issued, was for failure to separate recycling from other solid waste.
- On Earth Day last year, Mayor Bowser kicked off DPW's first citywide Food Waste Drop-Off program. Through this free service, residents are able to drop off food waste at designated farmers markets, one in each ward, on Saturdays. Three of these drop-off locations—Columbia Heights, Dupont Circle, and Eastern Market—are also now open throughout the winter season. The food waste collected at these drop-off locations is composted locally at District community composting sites and at the Prince George's County Organics Compost facility. From the start of the program (April 22, 2017) through February 24, 2018, the program collected more than 129,000 pounds of organics from more than 16,000 participants in all eight wards.
- FY 2017 also marked the beginning of DPW's grasscycling campaign, through which we encouraged residents to leave their grass clippings on their lawns instead of putting them in the trash. The U.S. Environmental Protection Agency (EPA) estimates that yard waste trimmings account for 14 percent of the typical residential waste stream. To help educate residents about the benefits of grasscycling, DPW mailed informational postcards to residents in neighborhoods that produce the most yard waste.
- Earlier this year, as part of our efforts to promote composting, recycling, and the benefits of reducing waste, DPW and DOEE helped host the Kingman Island Bluegrass and Folk Festival for the second year in a row. The 2017 music festival attracted approximately 7,000 fans who, with the help of Green Team volunteers, separated waste into designated zero waste stations. As a result, the festival achieved an impressive 78.8 percent waste diversion rate.
- On October 10, 2017, DPW—in partnership with DC Water—commenced a study to assess the feasibility of sending pre-processed food waste to Blue Plains to be converted to methane to generate electricity and produce a class A soil amendment. We anticipate delivery of a final report this spring. Once completed, DPW will explore synergies between composting and co-digestion in terms of policy and end-product development and marketing.

In addition to these and other zero waste achievements from the last year, we are working hard to be environmentally friendly throughout our operations. Of particular note is the work DPW's Fleet Management Administration has been doing to reduce fuel consumption, and the efforts the DC Snow Team has made to reduce the amount of salt spread on our roadways.

Our Fleet Management Administration keeps the District's agencies moving by fueling their 6,000 government vehicles. Of these 6,000 vehicles, 1,617 were alternative fuel vehicles in FY 2017. The increase in alternative fuel vehicles, along with the use of more fuel efficient heavy duty vehicles, played a major role in allowing us to reduce our overall use of fuel in the last fiscal year by five percent. On June 16, 2017, I was proud to accept an award on behalf of the District for our expanded deployment of alternative fuel vehicles and demonstrated commitment to sustainability from Natural Gas Vehicles for America, a national organization that represents more than 230 companies, environmental groups, and government organizations interested in the promotion and use of natural gas and bio-methane as transportation fuels.

Looking ahead, DPW's Fleet Management Administration has developed a vehicle modernization plan for 2019 through 2024 to replace all DPW vehicles following a seven-year cycle. Under this plan, DPW will acquire more efficient vehicles that will reduce fuel use and greenhouse gas emissions.

Switching to our snow operation, while the safety of motorists on District roads is our chief concern, we have worked hard to balance this priority with the environmental concerns of over-salting our roads. We are doing this in three primary ways: increased use of brine, enhanced calibration training of our salt truck drivers and supervisors, and stepped up quality assurance/quality control measures.

- This winter season, as previously mentioned, the DC Snow Team has ramped up its use of brine as an anti-icing technique. Liquid brine, which is a mixture of water, sodium chloride, and beet juice, helps keep snow and ice from bonding to the pavement and reduces the amount of time needed to remove snow from streets. Brine has also been shown to decrease the corrosion of infrastructure. While we are still collecting and analyzing data, we do seem to be seeing a direct correlation between higher brine use and decreased salt use.
- In addition to using more brine, another way DPW is working to decrease our salt use is by enhancing the calibration training provided to salt truck drivers and supervisors. When salt trucks are properly calibrated, drivers can adjust the application rate depending on the type of storm. This ensures that our salt trucks are not applying extra salt to our city's streets.
- And third, we have enhanced our quality assurance/quality control measures. An example of this is our automatic vehicle locator system that tracks where our plows are in real-time. This allows us to ensure streets are not double salted and that any salt spills can be addressed quickly.

While salt use in our region of the country varies greatly depending on a number of factors—including the type of precipitation, road surface temperatures, the time of day the storm is hitting,

and the type of traffic expected during the storm—in terms of an overall trend, we are using less salt. I will also add that DOEE is a critical part of the District’s Snow Team, providing input and assistance on preventing and minimizing environmental impacts of routine snow and ice removal operations.

Community Engagement

As you know, engagement with the residents we serve is incredibly important. During the last fiscal year, a combination of myself and DPW’s SWEEP inspectors participated in approximately 170 Advisory Neighborhood Commission, civic association, and community organization meetings. At each of the meetings I attend, I invite questions and use the time to help inform residents about DPW’s services and programs. SWEEP Jr., DPW’s youth-focused unit, hosted an additional 85 events attracting approximately 16,000 young people.

Every news release distributed by DPW is sent to reporters, approximately 80 neighborhood listservs, DC Council offices, and all Advisory Neighborhood Commissioners. These releases, along with testimony before Council and a range of reports, are posted on DPW’s website. DPW is also very active on social media, which includes answering resident questions and posting across multiple channels daily. During DC Snow Team deployments, residents have come to rely on our team’s real-time updates about road and weather conditions and tips for safe driving.

As part of Back to Basics DC, Mayor Bowser kicked off DPW’s second annual “Great Graffiti Wipeout,” an eight-week initiative to remove graffiti and illegal tagging around the District. DPW responds to more than 40,000 requests to remove graffiti and posters each year. In FY 2017, the abatement team focused on our hardest hit corridors.

Fiscal Year 2017 marked the tenth anniversary of MuralsDC, a graffiti abatement initiative funded by DPW in cooperation with the DC Commission on the Arts and Humanities. Using aerosol paint, MuralsDC projects provide local artists a responsible and legal means to exercise their artistic skill in a way that legitimizes graffiti as an art form and promote community awareness and respect for public and private property.

The tenth anniversary milestone was celebrated with 10 new murals, including the first in Southwest DC, and a new mural at Ben’s Chili Bowl featuring 15 personalities and iconic images of people who have made, or are currently making, a profound impact on the District of Columbia. The portraits were selected by the community via an online contest initiated by the legendary eatery in which more than 30,000 votes were cast. In total, there are now 75 murals throughout the city.

This past year, DPW also celebrated the tenth anniversary of Truck Touch, our annual event featuring a wide array of District government vehicles. Among the vehicles displayed were street sweepers, fire engines, hook and ladder trucks, dump trucks, tow trucks, one-stop mobile health and employment vans, mountain bikes, Segways, bucket trucks, snow plows, trash trucks, wreckers, and police vehicles – including a helicopter and a horse. DPW organizes Truck Touch, in partnership with more than 15 District government agencies and organizations, to provide a unique opportunity for residents to personally connect with the DC government personnel who

provide critical services to the city. The event also provided free boxed lunches to hundreds of children and teenagers through the DC Free Summer Meals program.

Employee Investments

At DPW, as is true throughout District government, our biggest asset is our employees. I feel strongly about investing in our employees and offering them the chance to build meaningful careers.

Through the DC Infrastructure Academy, DPW is offering a Commercial Driver's License (CDL) training program that will train approximately 140 DC residents in FY 2018 and 300 the following year. DPW is also gearing up for our automotive technician apprenticeship program that was recertified last year by the U.S. Department of Labor. DPW is the only District agency that currently has a registered apprenticeship program. This comprehensive program, run by capable and experienced technicians, provides on-the-job experience coupled with classroom training. The apprenticeship program includes employment for one year, with the potential to be renewed for a second year.

For the District, this program is a win-win. Training allows our city to retain workers, and allows them to gain good-paying jobs that enable them to support their families and contribute to the community. It also creates a pipeline of skilled employees that DPW and other city agencies can utilize to provide the essential services that keep our city running. The importance of investing in training for skilled trade employees cannot be overstated. It prepares people for a career, not just a job, and provides a pathway to the middle class—a priority Mayor Bowser has consistently championed. At DPW, we are proud that 70 percent of our employees are District residents. Having the chance to train the next generation of DC skilled laborers is a source of tremendous pride.

I am also pleased to share that DPW is partnering with DC Public Libraries to provide an adult learning curriculum for employees to complete their GED or obtain other certifications to move up the career ladder. And for those employees wanting to earn their college degree, in February 2017 we set up an open-house session for the College of America's online program that confers associate and bachelor's degrees through Southern New Hampshire University. More than 130 employees attended.

Career development is important at all levels of our organization. This past year, DPW employees attended conferences focused on data analytics, waste diversion, composting, recycling, and communications, to name just a few. One of our policy and project officers, Ms. Lia Rogers, was selected for the American Public Works Association's (APWA) Emerging Leaders Academy. Lia is among 16 professionals from across the country and Canada participating in the year-long program that provides intensive leadership and management training within the context of public works. Eight of our employees are also enrolled in programs offered by APWA's Mid-Atlantic Public Works Institute, where they learn about everything from managing small projects to putting together multi-million dollar budgets. I would like to take a brief moment to acknowledge three of our employees who are about to graduate from their programs: Daniel Harrison, Deputy Administrator of our Solid Waste Administration; Warnique

West, a sanitation supervisor in our Streets and Alleys Division; and Morris Yarborough, a sanitation supervisor in our Streets and Alleys Division.

These investments are in addition to our already robust employee trainings, which we are always working to update and improve. As an example, this past year we expanded our Snow Team training in several ways, including enhancing the calibration training provided to salt truck drivers and supervisors; creating a new training session focused on our SnowDash technology; and training other agencies on their assigned roles within the updated Winter Maintenance Plan. All of this training and much more culminated in the annual snow “dry run,” which took place on October 27, 2017.

Conclusion

As I hope you can tell, FY 2017 was a very productive year for our agency. I am proud of the progress we have made and excited to be building upon it in FY 2018. I would like to thank you, Chairperson Cheh, and the rest of the committee, for your leadership and support. As always, we strive to operate with complete transparency, and I will ensure that communication channels with your staff remain open and productive. With that, I would be happy to answer any questions you may have.